SEQUENCE LISTING

<110> Lawton, Robert
Mermer, Brion
Francoeur, Greg

<120> Specific Binding Protein for Treating
Canine Allergy

<130> 01-1275A

<140> 09/281,760
<141> 1999-03-30

<150> 09/058,331
<151> 1998-04-09

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Tyr Cys Arg Val Thr His Pro His Leu Pro Lys Asp Ile Val Arg Ser
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Ile

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Gln Cys Arg Val Thr His Pro His Leu Pro Arg Ala Leu Met Arg Ser
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Thr

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Thr

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Ile

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Tyr Cys Asn Val Thr His Pro Asp Leu Pro Lys Pro Ile Leu Arg Ser
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Ile

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Gln Cys Ile Val Asp His Pro Asp Phe Pro Ile Val Arg Ser Ile
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gagcaggata ccccaggtca acagcgggcc tggcatatga tggggtgaca gtcccaaggc    120

aggcactgac actggncctg tccccacagc caccagccag gacctg tct gtg ttc       175
                                                    Ser Val Phe
                                                    1

ccc ttg gcc tcc tgc tgt aaa gac aac atc gcc agt acc tct gtt aca       223
Pro Leu Ala Ser Cys Cys Lys Asp Asn Ile Ala Ser Thr Ser Val Thr
    5                  10                  15

ctg ggc tgt ctg gtc acc ggc tat ctc ccc atg tcg aca act gtg acc       271
Leu Gly Cys Leu Val Thr Gly Tyr Leu Pro Met Ser Thr Thr Val Thr
20                  25                  30                  35

tgg gac acg ggg tct cta aat aag aat gtc acg acc ttc ccc acc acc       319
Trp Asp Thr Gly Ser Leu Asn Lys Asn Val Thr Thr Phe Pro Thr Thr
                40                  45                  50

ttc cac gag acc tac ggc ctc cac agc atc gtc agc cag gtg acc gcc       367
Phe His Glu Thr Tyr Gly Leu His Ser Ile Val Ser Gln Val Thr Ala
            55                  60                  65

tcg ggc gag tgg gcc aaa cag agg ttc acc tgc agc gtg gct cac nnt       415
Ser Gly Glu Trp Ala Lys Gln Arg Phe Thr Cys Ser Val Ala His Xaa
        70                  75                  80

gag tcc acc gcc atc aac aag acc ttc agt gct aanccagggt tnnntggcca     468
Glu Ser Thr Ala Ile Asn Lys Thr Phe Ser Ala
    85                  90

catgacactg gagggagaag ggacaggctg gngaatgcgc catggctggt aacgcccagc     528

anatgtgggg ctggggctga cacatgagtc ccgtgggctn agagacacca ctgccacatg     588

gctgcctcta cttctagca tgt gcc tta aac ttc att ccg cct acc gtg aag       640
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                    Cys Ala Leu Asn Phe Ile Pro Pro Thr Val Lys
                    95                  100                 105

ctc ttc cac tcc tcc tgc aac ccc gtc ggt gat acc cac acc acc atc      688
Leu Phe His Ser Ser Cys Asn Pro Val Gly Asp Thr His Thr Thr Ile
                110                 115                 120

cag ctc ctg tgc ctc atc tct ggc tac gtc cca ggt gac atg gag gtc      736
Gln Leu Leu Cys Leu Ile Ser Gly Tyr Val Pro Gly Asp Met Glu Val
            125                 130                 135

atc tgg ctg gtg gat ggg caa aag gct aca aac ata ttc cca tac act      784
Ile Trp Leu Val Asp Gly Gln Lys Ala Thr Asn Ile Phe Pro Tyr Thr
        140                 145                 150

gca ccc ggc aca aag gag ggc aac gtg acc tct acc cac agc gag ctc      832
Ala Pro Gly Thr Lys Glu Gly Asn Val Thr Ser Thr His Ser Glu Leu
    155                 160                 165

aac atc acc cag ggn nng tgn gta tcc caa aaa acc tac acc tgc cag      880
Asn Ile Thr Gln Gly Xaa Xaa Val Ser Gln Lys Thr Tyr Thr Cys Gln
170                 175                 180                 185

gtc acc tat caa ggc ttt acc ttt aaa gat gag gct cgc aag tgc tca      928
Val Thr Tyr Gln Gly Phe Thr Phe Lys Asp Glu Ala Arg Lys Cys Ser
                190                 195                 200

gag atggcccccc tgtcccccag aaacccagat gcgcgaggct cagagatgag           981
Glu


ggccaaggca cgccctcatg cagcctctca cacactgcag ag tcc gac ccc cga      1035
                                              Ser Asp Pro Arg
                                                  205

ggc gtg agc agc tac ctg agc cca ccc agc ccc ctt gac ctg tat gtc     1083
Gly Val Ser Ser Tyr Leu Ser Pro Pro Ser Pro Leu Asp Leu Tyr Val
            210                 215                 220

cac aag gcg ccc aag atc acc tgc ctg gta gtg gac ctg gcc acc atg     1131
His Lys Ala Pro Lys Ile Thr Cys Leu Val Val Asp Leu Ala Thr Met
        225                 230                 235

gaa ggc atg aac ctg acc tgg tac cgg gag agc aaa gaa ccc gtg aac     1179
Glu Gly Met Asn Leu Thr Trp Tyr Arg Glu Ser Lys Glu Pro Val Asn
    240                 245                 250

ccg gtc cct ttg aac aag aag gat cac ttc aat ggg acg atc aca gtc     1227
Pro Val Pro Leu Asn Lys Lys Asp His Phe Asn Gly Thr Ile Thr Val
255                 260                 265                 270

acg tct acc ctg cca gtg aac acc aat gac tgg atc gag ggc gag acc     1275
Thr Ser Thr Leu Pro Val Asn Thr Asn Asp Trp Ile Glu Gly Glu Thr
                275                 280                 285

tac tat tgc agg gtg acc cac ccg cac ctg ccc aag gac atc gtg cgc     1323
Tyr Tyr Cys Arg Val Thr His Pro His Leu Pro Lys Asp Ile Val Arg
            290                 295                 300

tcc att gcc aag gcc cct ggt gagccacggg cccaggggag gtgggcgggc       1374
Ser Ile Ala Lys Ala Pro Gly
        305
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ctcctgancc ggagcctggg ctgaccccac acctatccac aggc aag cgt gcc ccc    1430
                                                 Lys Arg Ala Pro
                                                 310

ccg gat gtg tac ttg ttc ctg cca ccg gag gag gag cag ggg acc aag    1478
Pro Asp Val Tyr Leu Phe Leu Pro Pro Glu Glu Glu Gln Gly Thr Lys
    315                 320                 325

gac aga gtc acc ctc acg tgc ctg atc cag aac ttc ttc ccc gag gac    1526
Asp Arg Val Thr Leu Thr Cys Leu Ile Gln Asn Phe Phe Pro Glu Asp
330                 335                 340                 345

att tca gtg caa tgg ctg cga aac gac agc ccc atc cag aca gac cag    1574
Ile Ser Val Gln Trp Leu Arg Asn Asp Ser Pro Ile Gln Thr Asp Gln
                350                 355                 360

tac acc acc acg ggg ccc cac aag gtc tcg ggc tcc agg cct gcc ttc    1622
Tyr Thr Thr Thr Gly Pro His Lys Val Ser Gly Ser Arg Pro Ala Phe
            365                 370                 375

ttc atc ttc agt cgc ctg gtg gac tgg gag cag aaa aac aaa ttc acc    1670
Phe Ile Phe Ser Arg Leu Val Asp Trp Glu Gln Lys Asn Lys Phe Thr
        380                 385                 390

tgc caa gtg gtg cat gag gcg ctg tcc ggc tct agg atc ctc cag aaa    1718
Cys Gln Val Val His Glu Ala Leu Ser Gly Ser Arg Ile Leu Gln Lys
    395                 400                 405

tgg gtg tcc aaa acc ccc ggt aaa tgatgcccac cctcctcccg ccgccacccc    1772
Trp Val Ser Lys Thr Pro Gly Lys
410                 415

ccagggctcc acctgctggg gcaggggagg ggggctggca agaccctcca tctatccttn   1832

tcaataaaca                                                          1842
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Ser Val Thr Leu Gly Cys Leu Val Thr Gly Tyr Leu Pro Met Ser Thr
            20                  25                  30

Thr Val Thr Trp Asp Thr Gly Ser Leu Asn Lys Asn Val Thr Thr Phe
        35                  40                  45

Pro Thr Thr Phe His Glu Thr Tyr Gly Leu His Ser Ile Val Ser Gln
    50                  55                  60

Val Thr Ala Ser Gly Glu Trp Ala Lys Gln Arg Phe Thr Cys Ser Val
65                  70                  75                  80

Ala His Xaa Glu Ser Thr Ala Ile Asn Lys Thr Phe Ser Ala
                85                  90
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<223> The 'Xaa' at location 81 stands for Lys, Arg, Thr, Met, Glu, Gly, Ala, Val, Gln, Pro, Leu, a stop codon, Trp, or Ser.

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<223> The 'Xaa' at location 82 stands for a stop codon, Trp, or Cys.

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Cys Ala Leu Asn Phe Ile Pro Pro Thr Val Lys Leu Phe His Ser Ser
1 5 10 15

Cys Asn Pro Val Gly Asp Thr His Thr Thr Ile Gln Leu Leu Cys Leu
20 25 30

Ile Ser Gly Tyr Val Pro Gly Asp Met Glu Val Ile Trp Leu Val Asp
35 40 45

Gly Gln Lys Ala Thr Asn Ile Phe Pro Tyr Thr Ala Pro Gly Thr Lys
50 55 60

Glu Gly Asn Val Thr Ser Thr His Ser Glu Leu Asn Ile Thr Gln Gly
65 70 75 80

Xaa Xaa Val Ser Gln Lys Thr Tyr Thr Cys Gln Val Thr Tyr Gln Gly
85 90 95

Phe Thr Phe Lys Asp Glu Ala Arg Lys Cys Ser Glu
100 105

<210> 36

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1               5                   10                  15

Asp Leu Tyr Val His Lys Ala Pro Lys Ile Thr Cys Leu Val Val Asp
            20                  25                  30

Leu Ala Thr Met Glu Gly Met Asn Leu Thr Trp Tyr Arg Glu Ser Lys
        35                  40                  45

Glu Pro Val Asn Pro Val Pro Leu Asn Lys Lys Asp His Phe Asn Gly
    50                  55                  60

Thr Ile Thr Val Thr Ser Thr Leu Pro Val Asn Thr Asn Asp Trp Ile
65                  70                  75                  80

Glu Gly Glu Thr Tyr Tyr Cys Arg Val Thr His Pro His Leu Pro Lys
                85                  90                  95

Asp Ile Val Arg Ser Ile Ala Lys Ala Pro Gly
            100                 105
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<210> 37

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H1 <400> 37

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Lys Arg Ala Pro Pro Asp Val Tyr Leu Phe Leu Pro Pro Glu Glu Glu
1               5                  10                  15

Gln Gly Thr Lys Asp Arg Val Thr Leu Thr Cys Leu Ile Gln Asn Phe
            20                  25                  30

Phe Pro Glu Asp Ile Ser Val Gln Trp Leu Arg Asn Asp Ser Pro Ile
        35                  40                  45

Gln Thr Asp Gln Tyr Thr Thr Thr Gly Pro His Lys Val Ser Gly Ser
    50                  55                  60

Arg Pro Ala Phe Phe Ile Phe Ser Arg Leu Val Asp Trp Glu Gln Lys
65                  70                  75                  80

Asn Lys Phe Thr Cys Gln Val Val His Glu Ala Leu Ser Gly Ser Arg
                85                  90                  95

Ile Leu Gln Lys Trp Val Ser Lys Thr Pro Gly Lys
            100                 105
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<213> Canis familiaris

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Glu Gly Met Asn Leu Thr Trp Tyr Arg Glu Ser Lys Glu Pro Val Asn
1               5                  10                  15

ccg gtc cct ttg aac aag aag gat cac ttc aat ggg acg atc aca gtc       96
Pro Val Pro Leu Asn Lys Lys Asp His Phe Asn Gly Thr Ile Thr Val
            20                  25                  30

acg tct acc ctg cca gtg aac acc aat gac tgg atc gag ggc gag acc      144
Thr Ser Thr Leu Pro Val Asn Thr Asn Asp Trp Ile Glu Gly Glu Thr
        35                  40                  45

tac tat tgc agg gtg acc cac ccg cac ctg ccc aag gac atc gtg cgc      192
Tyr Tyr Cys Arg Val Thr His Pro His Leu Pro Lys Asp Ile Val Arg
    50                  55                  60

tcc att gcc aag gcc cct ggt                                         213
Ser Ile Ala Lys Ala Pro Gly
65                  70
```

<210> 39

<211> 71

<212> PRT

<213> Canis familiaris

<400> 39

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Glu Gly Met Asn Leu Thr Trp Tyr Arg Glu Ser Lys Glu Pro Val Asn
1               5                  10                  15

Pro Val Pro Leu Asn Lys Lys Asp His Phe Asn Gly Thr Ile Thr Val
            20                  25                  30

Thr Ser Thr Leu Pro Val Asn Thr Asn Asp Trp Ile Glu Gly Glu Thr
        35                  40                  45
```

Tyr Tyr Cys Arg Val Thr His Pro His Leu Pro Lys Asp Ile Val Arg
50 55 60

H1

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